

Laboratory Skills 1**Recognizing Laboratory Safety****Introduction**

An important part of your study of biology will be working in a laboratory. In the laboratory, you and your classmates will learn biology by actively conducting and observing experiments. Working directly with living things will provide opportunities for you to better understand the principles of biology discussed in your textbook or talked about in class.

Most of the laboratory work you will do is quite safe. However, some laboratory equipment, chemicals, and specimens can be dangerous if handled improperly. Laboratory accidents do not just happen. They are caused by carelessness, improper handling of equipment and specimens, or inappropriate behavior.

In this investigation, you will learn how to prevent accidents and thus work safely in a laboratory. You will review some safety guidelines and become acquainted with the location and proper use of safety equipment in your classroom laboratory.

Problem

What are the proper practices for working safely in a biology laboratory?

Pre-Lab Discussion

Read the entire investigation. Then, work with a partner to answer the following questions.

1. Why might eating or drinking in the laboratory be dangerous?

2. How can reading through the entire investigation before beginning the Procedure help prevent accidents?

3. Look around the room. What safety equipment do you recognize?

4. What safety procedures should you follow when cleaning up at the end of an investigation?

5. Can minor safety procedures be skipped in order to finish the investigation before the bell rings?

Materials (per group)

Biology textbook

Laboratory safety equipment (for demonstration)

Procedure

1. Carefully read the list of laboratory safety rules listed in Appendix B of your textbook.
2. Special symbols are used throughout this laboratory manual to call attention to investigations that require extra caution. Use Appendix B in your textbook as a reference to describe what each symbol printed below means.



1. _____



2. _____



3. _____



4. _____



5. _____



6. _____



7. _____



8. _____

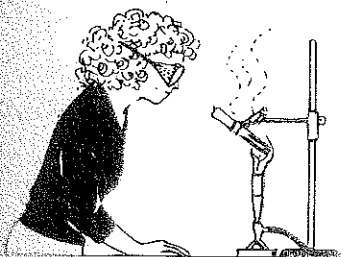
3. Your teacher will point out the location of the safety equipment in your classroom laboratory. Pay special attention to instructions for using such equipment as fire extinguishers, eyewash fountains, emergency blankets, emergency showers, and items in first-aid kits. Use the space provided below to list the location of all safety equipment in your laboratory.

Analysis and Conclusions

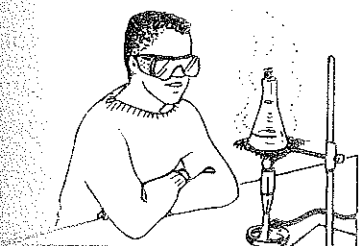
Observing Look at each of the following drawings and explain why the laboratory activities pictured are unsafe.



1. _____



2. _____



3. _____



4. _____

Going Further

Many houseplants and some plants found in biology laboratories are poisonous. Use appropriate library resources to do research on several common poisonous plants. Share your research with your classmates. You may prepare a booklet describing common poisonous plants. Use drawings or photographs to illustrate your booklet.